This document details the scope of the Beneficial Use and Initial Market Evaluation Addendum Document and Pre-Feasibility Study Treatment Technologies Table as requested by EPA during a June 11, 2008 meeting with the LWG.

Task 1 – Beneficial Use and Initial Market Survey Addendum Document

Objective – Collect preliminary information on possible beneficial uses of materials produced during the remediation activities at Portland Harbor. Conduct an initial market survey to determine the possible demand and marketable costs of beneficial use material. Present the results to EPA in a document that will be an addendum to the Alternatives Development and Screening Summary Report.

Scope of Work – LWG will identify beneficial uses for different materials potentially resulting from remediation activities at Portland Harbor. Examples of beneficial use material include: sand, lightweight aggregate, and topsoil. LWG recognizes that the materials may be remediated to various levels and will identify potential end users for each material, based on the type of material and residual contaminant levels. Anchor will then conduct an initial market survey of these users. The market survey will contain questions such as:

- How much material (e.g., sand) does your entity specify for projects each year?
- Do you see a continuing demand for this material in the future?
- What prices are you currently paying for the material?
- If you aren't using this material (e.g., lightweight aggregate), what prohibits you from using it?
- If this material was available at an economical price, would you see a potential to use it in more projects? If so, how much demand would you foresee?

LWG anticipates polling the Oregon Department of Transportation, Washington Department of Transportation, City of Vancouver, City of Portland, and the Port of Portland, as well as engineering consultants and contractors to each of these entities. It is anticipated that these entities are the largest users of potential beneficial use materials that would result from the project. These entities were also selected as they generally develop regular, annual budgets for projects that could incorporate the types of beneficial use product that could be generated through the sediment treatment process. While other opportunities for beneficial use materials may exist, such as redevelopment of Brownfield sites by private entities, it is not possible to investigate the benefit of projects that are theoretical or in the planning stages.

It should be recognized that there are limitations on conducting this type of initial market survey including:

- Cleanup levels, and thus the volumes of sediment to be remediated, are not defined.

- Information gathering is dependent on the willingness and ability of potential users to respond, as well as the timeliness of responses, and this may limit the amount of information that can be compiled by the time it needs to be reported.
- Potential users and market conditions can change rapidly with time and information gained now may eventually be inapplicable or irrelevant to future conditions when remedial action actually takes place.

Because of these limitations, we have specifically used the term "initial" when referring to this survey, and it work is not intended to be as comprehensive as a full scale market survey.

Deliverable – Upon completion of the beneficial use and initial market evaluation, LWG will summarize the results in a document that will be submitted to EPA. The document will be attached to the Alternatives Screening Document as an addendum and will consist of:

- Information garnered from entities polled
- Limitations of market survey
- Record of contacts and type of information obtained from each contact.

Task 2 – Pre-Feasibility Study Treatment Technologies Table

Objective – Develop a table presenting viable treatment technologies for further evaluation in the Feasibility Study.

Scope of Work – Anchor will develop a table that presents viable treatment technologies for further evaluation in the Feasibility Study. The table will evaluate each treatment technology according to its effectiveness to treat Site initial contaminants of potential concern (iCOPCs) and cost. In terms of costs, the following will be considered: initial market costs, maintenance costs, long-term monitoring costs (if necessary), and potential cost offsets. This table will identify the primary challenges associated with implementing a technology, particularly those that may have an impact on cost, and identify those technologies proposed for carrying through the feasibility study.

LWG will determine information that would be necessary to successfully design each treatment technology to help better define costs. Additionally, potential vendors of each technology will be consulted to aid in developing effectiveness and cost information. The data obtained during the Beneficial Use and Initial Market Evaluation (Task 1) will help to better define the potential marketability and cost offsets of beneficial use materials produced by the treatment technologies evaluated in the table. Treatment technologies that do not effectively treat the Portland Harbor iCOPCs or are clearly cost prohibitive will not be retained for further evaluation in the Feasibility Study. The table will list the primary limitations and opportunities for each of the treatment technologies.

At this time, cleanup levels have not yet been selected and potential sediment volumes to be remediated are not known. Additionally, areas where treatment facilities could be built, and their proximity to the Site, have not been identified. These uncertainties influence the cost of the treatment technologies and are a limitation of this work.

This table will support the Feasibility Study in terms of providing better understanding of the viability of different treatment technologies and provide a pre-screening step.

Deliverable – The Feasibility Study Treatment Technologies table will be submitted as a stand alone table summarizing the above information and those treatment technologies that LWG proposes to carry into the Feasibility Study. To provide time for EPA review and comment prior to start of the Alternatives Development and Screening Summary Report, we anticipate providing a draft of this table to EPA by October 2008.